ELSEVIER International Journal of Mass Spectrometry and Ion Processes 171 (1997) 281

Author index

Adams, F., 191
Adriaens, A., 191
Almeida, D.P., 119
Alvarez, I., 127
Anderson, S.L., 159
Andre, J., 19, 253
Arakawa, K., 209

Baer, T., 243
Basir, Y.J., 159
Basner, R., 83
Becker, J.S., 183
Becker, K., 83, 119
Berdnikov, A.S., 203
Berglund, M., 263
Brenton, A.G., 7
Brincourt, G., 19, 253
Broekaert, J.A.C., 183
Bruch, D., 147

Carette, M., 19, 253
Cassady, C.J., 135
Catella, R., 19
Christian, J.F., 159
Cisneros, C., 127

De Bièvre, P., 231, 263
de Urquijo, J., 127
Deutsch, H., 83, 119
Dietze, H.-J., 183
Duflot, D., 215

Elst, K., 191
Endoh, H., 209

Farrar, J., 1
Fujibuchi, J., 95

Gonfiantini, R., 231
Gross, M.L., 1

Halliday, A.N., 105
Harland, P.W., 173
Hayakawa, S., 209
Henrickson, C., 1
Hinojosa, G., 127
Hirose, T., 273
Hollis, J., 1
Holman, R.W., 1

Inoue, M., 73
Ishikawa, M., 95

Jai-nhuknan, J., 135
Jäger, R., 183

Keister, J.W., 243
Kennedy, R.A., 51
Khare, S.P., L1
Kim, M.S., 31
Kirkwood, D.A., 39
Koyano, I., 95
Kushwaha, M.S., L1

Leather, C., 7
Lee, A.R., 7
Lee, D.-C., 105
Lee, Y.J., 31
Liu, X.-H., L7
Liu, Y.Z., 73
Lou, N.-Q., L7
Luo, X., 105

Masuda, A., 73
Mayhew, C.A., 51
Märk, T.D., 119
Morishita, N., 209

Nagaoka, S.-i., 95
Nagata, T., 273
Nguema, T., 19

Ohshita, J., 95
Opitz, J., 147

Payan, J.C., 253
Perrier, P., 19, 253
Peverall, R., 51

Qi, H.P., 263

Rehkämper, M., 105

Saksena, V., L1
Schmidt, M., 83
Srinivas, R., 79, L13
Stace, A.J., 39

Tarnovsky, V., 83
Taylor, P.D.P., 231, 263
Terlouw, J.K., L13
Tomperi, P., 243
Tsukuda, T., 273

Valkiers, S., 231
Vallance, C., 173
van der Hart, W.J., 269
Vivekananda, S., 79, L13
von Bünau, G., 147

Wan, Z., 159
Wang, X.-Y., L7
Watts, P., 51
Whittle, C.Ed., 1
Wilkins, A.C.R., 7
Wilson, D.S., 1
Wollnik, H., 203

Yavor, M.I., 203
Yousif, F.B., 127

Zerega, Y., 19, 253
Zhang, X., 135
Zhang, X.-G., L7

ELSEVIER International Journal of Mass Spectrometry and Ion Processes 171 (1997) 283–287

Subject index

Ab initio calculations
Ab initio calculations on a possible pathway for the formation of C_3H_3 fragment ions from the benzene radical cation 269
Aberration
Beam distortions and their compensation in sector field mass spectrometers 203
Adsorption isotopic effects
Adsorption in gas mass spectrometry II. Effects on the measurement of isotope amount ratios 231
Adsorption-desorption
Adsorption in gas mass spectrometry II. Effects on the measurement of isotope amount ratios 231
$Al_xGa_{1-x}As$
The study of ripple formation and degradation of depth resolution in GaAs and $Al_xGa_{1-x}As$ structures 191
Anionic clusters of sulfur dioxide
Electronic structures of $(SO_2)_n^-$ as studied by photoelectron spectroscopy 273
Appearance energies
Electron impact and multiphoton ionization and fragmentation of molybdenum-cyclopentadienyl-dicarbonyl-nitrosyl at 351, 248 and 193 nm 147
Atomic and molecular collision processes and interactions
Generation of an H_3^+ ($\nu = 0$) beam and its diagnosis from the observation of its polar dissociation in collison with He 127
Atomic weight
Calibrated measurements of the isotopic composition and atomic weight of the natural Li isotopic reference material IRMM-016 263

Beam distortion
Beam distortions and their compensation in sector field mass spectrometers 203
Bond energies
Electron impact and multiphoton ionization and fragmentation of molybdenum-cyclopentadienyl-dicarbonyl-nitrosyl at 351, 248 and 193 nm 147

C_3H_3 fragment ions
Ab initio calculations on a possible pathway for the formation of C_3H_3 fragment ions from the benzene radical cation 269
C_3H_4 isomers
Dissociation mechanism of electronically excited C_3H_4 isomers by charge inversion mass spectrometry 209
CAD
On the reaction of the ethylene oxide radical cation with neutral ethylene oxide 1
Cations
Infrared and collision-induced fragmentation of iron ethoxide cations 39
Cesium iodide cluster ion
Elimination of the multiple collision effect from a mass-analyzed ion kinetic energy profile in collision-induced dissociation of high mass ions 31
Charge inversion mass spectrometry
Dissociation mechanism of electronically excited C_3H_4 isomers by charge inversion mass spectrometry 209
Chemical procedure
High precision $^{230}Th/^{232}Th$ and $^{234}U/^{238}U$ measurements using energy-filtered ICP magnetic sector multiple collector mass spectrometry 105
Chloromethane
Ab initio study of the chloromethane dication fragmentation 215
CID
Collision-induced dissociation and post-source decay of model dodecapeptide ions containing lysine and glycine 135
Cluster
A triple sector, guided-ion-beam mass spectrometer for cluster ion and fullerene scattering 159
Cluster
Solvation of magnesium oxide clusters with water in direct laser vaporization L7
Collision activation
Generation and characterization of ionic and neutral thiocarbonylisocyanate $[SCNCO]^{+/\cdot}$ by neutralization—reionization mass spectrometry (NRMS) L13
Collision-induced dissociation
Elimination of the multiple collision effect from a mass-analyzed ion kinetic energy profile in collision-induced dissociation of high mass ions 31
Configuration interaction

Ab initio study of the chloromethane dication fragmentation 215
Core-level photoexcitation
Fragmentation of $F_3SiCH_2CH_2Si(CH_3)_3$ vapour following Si:2p core-level photoexcitation. A search for a site-specific process in complex molecules 95
Cross sections
Extension of the DM formalism for the calculation of cross sections for the multiple ionization of atoms to the formation of highly charged ions 119
Cross-sections
Dissociative ionization of silane by electron impact 83

Depth resolution
The study of ripple formation and degradation of depth resolution in GaAs and $Al_xGa_{1-x}As$ structures 191
Dications
Ab initio study of the chloromethane dication fragmentation 215
Direct laser vaporization
Solvation of magnesium oxide clusters with water in direct laser vaporization L7
Dissociation mechanism
Dissociation mechanism of electronically excited C_3H_4 isomers by charge inversion mass spectrometry 209
Dissociative photoionization
Ethyl loss kinetics of tetraethylsilane ions studied by TPEPICO 243

Electron binding energy
Electronic structures of $(SO_2)_n^-$ as studied by photoelectron spectroscopy 273
Electron capture
Single electron capture by B^{2+} ions in Ne, Ar, Kr and Xe 7
Electron impact ionization
Dissociative ionization of silane by electron impact 83
Energy distribution
Investigations on the ion energy distribution in an analytical radiofrequency glow discharge and its mass spectrometrical application 183
Enthalpy of formation
Electron impact and multiphoton ionization and fragmentation of molybdenum-cyclopentadienyl-dicarbonyl-nitrosyl at 351, 248 and 193 nm 147
ESI-FTICR
Collision-induced dissociation and post-source decay of model dodecapeptide ions containing lysine and glycine 135
Ethylene oxide
On the reaction of the ethylene oxide radical cation with neutral ethylene oxide 1

Fourier analysis
New operating mode of a quadrupole ion trap in mass spectrometry 4. Simulation studies 19
Fourier analysis
Probing radial and axial secular frequencies in a quadrupole ion trap 253
Fragmentation
Ab initio study of the chloromethane dication fragmentation 215
Fragmentation of C_6H_6 radical cations
Ab initio calculations on a possible pathway for the formation of C_3H_3 fragment ions from the benzene radical cation 269
Fullerene
A triple sector, guided-ion-beam mass spectrometer for cluster ion and fullerene scattering 159

Gas mass spectrometry
Adsorption in gas mass spectrometry II. Effects on the measurement of isotope amount ratios 231
Gas-phase reaction
On the reaction of the ethylene oxide radical cation with neutral ethylene oxide 1
Glow discharge mass spectrometry
Investigations on the ion energy distribution in an analytical radiofrequency glow discharge and its mass spectrometrical application 183

Hetero cumulenes
Generation and characterization of ionic and neutral thiocarbonylisocyanate $[SCNCO]^{+/\cdot}$ by neutralization—reionization mass spectrometry (NRMS) L13
High precision
High precision $^{230}Th/^{232}Th$ and $^{234}U/^{238}U$ measurements using energy-filtered ICP magnetic sector multiple collector mass spectrometry 105
High resolution
Single electron capture by B^{2+} ions in Ne, Ar, Kr and Xe 7
Hydrochlorofluorocarbons
Selected ion flow tube study of the reactions of O^- and O_2^- with $CHCl_2F$, $CHClF_2$, CHF_3, CH_2ClF, CH_2F_2, CH_3F, CHF_2CHF_2, CH_2FCF_3, and CH_3CHF_2 51
Hydrofluorocarbons
Selected ion flow tube study of the reactions of O^- and O_2^- with $CHCl_2F$, $CHClF_2$, CHF_3, CH_2ClF, CH_2F_2, CH_3F, CHF_2CHF_2, CH_2FCF_3, and CH_3CHF_2 51

ICP MS
High precision $^{230}Th/^{232}Th$ and $^{234}U/^{238}U$ measure-

ments using energy-filtered ICP magnetic sector multiple collector mass spectrometry 105
Infrared
Infrared and collision-induced fragmentation of iron ethoxide cations 39
Ion guide
A triple sector, guided-ion-beam mass spectrometer for cluster ion and fullerene scattering 159
Ion trap
Infrared and collision-induced fragmentation of iron ethoxide cations 39
Ion/molecule reactions
Selected ion flow tube study of the reactions of O^- and O_2^- with $CHCl_2F$, $CHClF_2$, CHF_3, CH_2ClF, CH_2F_2, CH_3F, CHF_2CHF_2, CH_2FCF_3, and CH_3CHF_2 51
Ionization cross-section
Ionization cross-sections and ionization efficiency curves from polarizability volumes and ionization potentials 173
Ionization efficiency curve
Ionization cross-sections and ionization efficiency curves from polarizability volumes and ionization potentials 173
Ionization potential
Ionization cross-sections and ionization efficiency curves from polarizability volumes and ionization potentials 173
Ionization theory
Ionization cross-sections and ionization efficiency curves from polarizability volumes and ionization potentials 173
Iron ethoxide
Infrared and collision-induced fragmentation of iron ethoxide cations 39
Isotope amount ratios
Adsorption in gas mass spectrometry II. Effects on the measurement of isotope amount ratios 231
Isotope ratio
A peculiar oxygen isotope fractionation in the production of ReO_4^- ion by thermal ionization 73
Isotopic composition
Calibrated measurements of the isotopic composition and atomic weight of the natural Li isotopic reference material IRMM-016 263
Isotopic fractionation
A peculiar oxygen isotope fractionation in the production of ReO_4^- ion by thermal ionization 73

Kinetics
Ethyl loss kinetics of tetraethylsilane ions studied by TPEPICO 243

Leak rate
Adsorption in gas mass spectrometry II. Effects on the measurement of isotope amount ratios 231
Lithium
Calibrated measurements of the isotopic composition and atomic weight of the natural Li isotopic reference material IRMM-016 263

Magnesium oxide
Solvation of magnesium oxide clusters with water in direct laser vaporization L7
MALDI-TOF
Collision-induced dissociation and post-source decay of model dodecapeptide ions containing lysine and glycine 135
Manufacturing defects
Beam distortions and their compensation in sector field mass spectrometers 203
Mass spectrometer
A triple sector, guided-ion-beam mass spectrometer for cluster ion and fullerene scattering 159
Beam distortions and their compensation in sector field mass spectrometers 203
Mass spectrometry
Collision-induced dissociation and post-source decay of model dodecapeptide ions containing lysine and glycine 135
Probing radial and axial secular frequencies in a quadrupole ion trap 253
Calibrated measurements of the isotopic composition and atomic weight of the natural Li isotopic reference material IRMM-016 263
Mass-analyzed ion kinetic energy spectrometry
Elimination of the multiple collision effect from a mass-analyzed ion kinetic energy profile in collision-induced dissociation of high mass ions 31
Measurement properties
New operating mode of a quadrupole ion trap in mass spectrometry 4. Simulation studies 19
Metastable ion decay
Electron impact and multiphoton ionization and fragmentation of molybdenum-cyclopentadienyl-dicarbonyl-nitrosyl at 351, 248 and 193 nm 147
Molecular beam sources and techniques
Generation of an H_3^+ ($\nu = 0$) beam and its diagnosis from the observation of its polar dissociation in collison with He 127
Molecular dissociation
Generation of an H_3^+ ($\nu = 0$) beam and its diagnosis from the observation of its polar dissociation in collison with He 127
Molybdenum π-complexes
Electron impact and multiphoton ionization and

fragmentation of molybdenum-cyclopentadienyl-dicarbonyl-nitrosyl at 351, 248 and 193 nm 147
Multiphoton absorption pathways
Electron impact and multiphoton ionization and fragmentation of molybdenum-cyclopentadienyl-dicarbonyl-nitrosyl at 351, 248 and 193 nm 147
Multiple collision effect
Elimination of the multiple collision effect from a mass-analyzed ion kinetic energy profile in collision-induced dissociation of high mass ions 31
Multiple ionization
Extension of the DM formalism for the calculation of cross sections for the multiple ionization of atoms to the formation of highly charged ions 119

Negative thermal ionization mass spectrometry
A peculiar oxygen isotope fractionation in the production of ReO_4^- ion by thermal ionization 73
Neutralization–reionization mass spectrometry
Generation and characterization of ionic and neutral (methylthio)oxophosphane $(CH_3S–P=O)^{+\cdot/O}$ and (methoxy)oxophosphane $(CH_3O\text{-}P=O)^{+\cdot/O}$ by neutralization-reionization mass spectrometry 79
Neutralization-reionization
Generation and characterization of ionic and neutral thiocarbonylisocyanate $[SCNCO]^{+/\cdot}$ by neutralization—reionization mass spectrometry (NRMS) L13
Noble gases
Extension of the DM formalism for the calculation of cross sections for the multiple ionization of atoms to the formation of highly charged ions 119

Octapole
A triple sector, guided-ion-beam mass spectrometer for cluster ion and fullerene scattering 159
Organosilicon molecule
Fragmentation of $F_3SiCH_2CH_2Si(CH_3)_3$ vapour following Si:2p core-level photoexcitation. A search for a site-specific process in complex molecules 95
Oxygen
A peculiar oxygen isotope fractionation in the production of ReO_4^- ion by thermal ionization 73

PEPICO
Ethyl loss kinetics of tetraethylsilane ions studied by TPEPICO 243
Peptides
Collision-induced dissociation and post-source decay of model dodecapeptide ions containing lysine and glycine 135
Phosphorus chemistry
Generation and characterization of ionic and neutral (methylthio)oxophosphane $(CH_3S–P=O)^{+\cdot/O}$ and (methoxy)oxophosphane $(CH_3O\text{-}P=O)^{+\cdot/O}$ by neutralization-reionization mass spectrometry 79
Photoelectron spectroscopy
Electronic structures of $(SO_2)_n^-$ as studied by photoelectron spectroscopy 273
Photon Fragmentation
Infrared and collision-induced fragmentation of iron ethoxide cations 39
Plasma processing
Dissociative ionization of silane by electron impact 83
Polarizability volume
Ionization cross-sections and ionization efficiency curves from polarizability volumes and ionization potentials 173
PSD
Collision-induced dissociation and post-source decay of model dodecapeptide ions containing lysine and glycine 135

Quadrupole ion trap
New operating mode of a quadrupole ion trap in mass spectrometry 4. Simulation studies 19
Probing radial and axial secular frequencies in a quadrupole ion trap 253

Radiofrequency glow discharge
Investigations on the ion energy distribution in an analytical radiofrequency glow discharge and its mass spectrometrical application 183
Rhenium
A peculiar oxygen isotope fractionation in the production of ReO_4^- ion by thermal ionization 73
Ripple formation
The study of ripple formation and degradation of depth resolution in GaAs and $Al_xGa_{1-x}As$ structures 191

Scattering angular distribution
Elimination of the multiple collision effect from a mass-analyzed ion kinetic energy profile in collision-induced dissociation of high mass ions 31
Sector field
Beam distortions and their compensation in sector field mass spectrometers 203
Secular frequencies
Probing radial and axial secular frequencies in a quadrupole ion trap 253
Selected inflow tube
Selected ion flow tube study of the reactions of O^- and O_2^- with $CHCl_2F$, $CHClF_2$, CHF_3, CH_2ClF, CH_2F_2, CH_3F, CHF_2CHF_2, CH_2FCF_3, and CH_3CHF_2 51
Silicon tetrafluoride

Adsorption in gas mass spectrometry II. Effects on the measurement of isotope amount ratios 231
SIMS
The study of ripple formation and degradation of depth resolution in GaAs and $Al_xGa_{1-x}As$ structures 191
Simulation
New operating mode of a quadrupole ion trap in mass spectrometry 4. Simulation studies 19
Simulation
Probing radial and axial secular frequencies in a quadrupole ion trap 253
Site-specific excitation
Fragmentation of $F_3SiCH_2CH_2Si(CH_3)_3$ vapour following Si:2p core-level photoexcitation. A search for a site-specific process in complex molecules 95
Site-specific fragmentation
Fragmentation of $F_3SiCH_2CH_2Si(CH_3)_3$ vapour following Si:2p core-level photoexcitation. A search for a site-specific process in complex molecules 95
Solvation
Solvation of magnesium oxide clusters with water in direct laser vaporization L7
Synchrotron radiation
Fragmentation of $F_3SiCH_2CH_2Si(CH_3)_3$ vapour following Si:2p core-level photoexcitation. A search for a site-specific process in complex molecules 95

Techniques for molecular physics
Generation of an H_3^+ ($\nu = 0$) beam and its diagnosis from the observation of its polar dissociation in collison with He 127
Tetraethylsilane
Ethyl loss kinetics of tetraethylsilane ions studied by TPEPICO 243
Thermal ionisation
Calibrated measurements of the isotopic composition and atomic weight of the natural Li isotopic reference material IRMM-016 263
Thermodynamics
Ethyl loss kinetics of tetraethylsilane ions studied by TPEPICO 243
Thorium
High precision $^{230}Th/^{232}Th$ and $^{234}U/^{238}U$ measurements using energy-filtered ICP magnetic sector multiple collector mass spectrometry 105
Time-of-flight
New operating mode of a quadrupole ion trap in mass spectrometry 4. Simulation studies 19
Time-of-flight
Probing radial and axial secular frequencies in a quadrupole ion trap 253
TOF mass spectrometer
Solvation of magnesium oxide clusters with water in direct laser vaporization L7
Translational energy spectroscopy
Single electron capture by B^{2+} ions in Ne, Ar, Kr and Xe 7

Uranium
High precision $^{230}Th/^{232}Th$ and $^{234}U/^{238}U$ measurements using energy-filtered ICP magnetic sector multiple collector mass spectrometry 105

Vibrational analysis
Generation of an H_3^+ ($\nu = 0$) beam and its diagnosis from the observation of its polar dissociation in collison with He 127